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Department of Energy
Ohio Field Office
Fernald Area Office
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

JAN 09 1998

DOE-0330-98

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF ANALYTICAL DATA ASSOCIATED WITH THE FIRST INTEGRATED ENVIRONMENTAL MONITORING PLAN QUARTERLY STATUS REPORT

This letter provides transmittal of the Department of Energy's (DOE) analytical data associated with the first Integrated Environmental Monitoring (IEMP) Quarterly Status Report. The analytical data associated with this report is provided on three disks: One disk contains groundwater data; one disk contains surface water data; and the final disk contains air data. The data provided on these disks have not been sent electronically to the agencies before. Each disk contains a WordPerfect file that identifies the various files on each disk and how the data in the tables of the IEMP status report can be generated. To better assist in the review of the data, definitions of laboratory and validation qualifiers are provided as an enclosure.

Should you have any questions regarding this submittal, please contact Kathleen Nickel at (513) 648-3166.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Nickel

Enclosure: As Stated

Recycled and Recyclable

cc w/enc:

N. Hallein, EM-42/CLOV
G. Jablonowski, USEPA-V, 5HRE-8J
R. Beaumier, TPSS/DERR, OEPA-Columbus
T. Schneider, OEPA-Dayton (total of 3 copies of enc)
F. Bell, ATSDR
D. S. Ward, HSI GeoTrans
R. Vandegrift, ODOH
F. Barker, Tetra Tech
D. Carr, FDF/52-2
T. Hagen, FDF/65-2
J. Harmon, FDF/90
AR Coordinator, FDF/78

cc w/o enc:

R. Heck, FDF/2
S. Hinnefeld, FDF/2
EDC, FDF/52-7

bcc w/enc:

R. J. Janke, DOE-FEMP

FEMP Data Validation Process Codes. The following qualifier code symbols and definitions shall be used by validators involved in the FEMP data validation process.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, but may not be consistent with amount present in the environmental sample due to deficiencies in the sample collection or analysis process. The data are considered quantitatively estimated. Data are useable for making decisions.

R The sample result was unusable due to serious deficiencies in the sample analysis, the instrument calibration, and/or the accompanying quality control analyses. The presence or absence of the analyte cannot be verified. Resampling and/or reanalysis are necessary to confirm or deny presence of the analyte.

RP Data is unusable for the intended purpose for which it was collected. The analysis is of sufficient quality to qualitatively demonstrate the presence of the analyte. However, quantitative results are not sufficiently accurate, precise, or sensitive to meet the objectives of the sampling program.

U Analyses were performed, but the analyte was not detected above the reported sample quantitation limit. Associated numerical value indicates the approximate concentration above which the analyte was determined not to be present.

UJ The analyte was not detected above the quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. This is a combination of the "U" and "J" qualifiers. The detection limit is considered estimated based on quality control (QC) considerations. If a decision requires quantitation of the analyte close to the associated numerical level, reanalysis or alternative analytical methods should be considered.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." The result can be used for decision-making purposes, but further information may be necessary to confidently identify the analyte in this sample.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. This qualifier indicates the presumptive presence of the analyte, but the result can only be considered estimated. This qualifier is not used in typical metals analyses, but could be used to qualify organic or radiochemistry data due to spectral interpretation problems.

NV The data were not validated. The reasons for nonvalidation are given in the Data Validation Report associated with the data set. This code is for informational purposes only, and is normally applied when some results within a release/fraction are validated but others are not.

Z This qualifier indicates that a more technically useable/representative result for the analyte exists in another analysis of the sample (a dilution, re-extraction or reinjection). The data should not be used. This code is for informational purposes.

- The data validator has not assigned a qualifier code to the positive result, signifying that the result is confident as reported. (When an undetected result is not further qualified, the validator will enter the "U" qualifier in the qualifier column.)

Laboratory Codes for Organic Data. The laboratory may assign the following qualifier codes when reporting data from organic analyses.

B The compound is detected in an associated lab blank.

J The result was detected above the PQL but below the CRDL, and should be considered estimated.

E The result is above the calibration range of the instrument.

U Analyses were performed, but the analyte was not detected above the reported sample quantitation limit.

D The result is reported from a diluted analysis of the original sample.

X The result was identified and quantified manually (as opposed to software identification).

P The pesticide result exhibited a significant degree of imprecision between the two chromatographic columns.

C This pesticide or polychlorinated biphenyl (PCB) identification was confirmed by the gas chromatography/mass spectroscopy semivolatile analysis of the same sample.

A For USEPA Contract Laboratory Program analyses only - The tentatively identified compound (TIC) is a suspected aldol condensation product.

H The sample was analyzed after the maximum holding time had elapsed.

G The analyte detected is not from gasoline or diesel fuel, but is believed to be some other combination of hydrocarbons.

N The "N" qualifier indicates the presumptive presence of the analyte (i.e., TICs). The result can be used for decision-making purposes, but further information may be necessary to confidently identify the analyte in this sample.

Laboratory Codes for Metals Data. The laboratory may assign the following qualifier codes when reporting data from metal analyses. These codes will be examined by data validators and may be used to help them requalify the data.

B Reported value was obtained from a reading that was less than the contract required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL).

E Normally used when serial dilution is performed in ICP analysis. The result is considered estimated because of possible matrix effects demonstrated by the serial dilution analysis. Also used in place of "W" (see below) to indicate that the GFAA post digestion spike recovery was less than 30 percent.

M GFAA duplicate injection precision was not met for results above the CRDL.

N Spiked sample recovery was not within control limits.

S Reported value was determined by the Method of Standard Additions (MSA).

W Post-digestion spike for GFAA analysis is out of control limits (85 to 115 percent), while sample absorbance is less than 50 percent of spike absorbance.

* Duplicate analysis was not within control limits.

+ Correlation coefficient for the MSA was less than 0.995.

No combination of "S", "W", or "+" shall appear in the same field for an analyte. Use of these qualifiers is mutually exclusive.